

Berendsen Fluid Power supplies and installs large-scale hydraulic power supply for high profile client

THE CUSTOMER

The client is a Melbourne based scientific organisation

JOB SPECIFICATIONS

- Upgrading an existing facility for laboratory testing. The customer's existing system was incapable of meeting increasingly stringent testing requirements and was also becoming unreliable & costly to maintain due to the age of the system.
- Eliminate power supply fluctuations to improve test accuracy
- Achieve a more demanding oil cleanliness target and thereby improve system reliability
- Improve control of system operating temperature within a precise range

WHY BERENDSEN

- The project was put out to open tender and Berendsen competed against many large, multinational organisations
- Berendsen's engineers produced a locally designed system that met all the requirements of the tender whilst presenting a cost-effective solution
- Berendsen's proven track record with large scale systems and capacity to locally manufacture custom-designed components, coupled with a local Melbourne presence and ability to meet a demanding project completion deadline ultimately lead to the project being awarded to Berendsen

SOLUTION

Turnkey hydraulic power supply system comprised of four pump sets with a combined output of 1,200 L/min at 20 MPa complete with valve manifolds, oil recirculation system, heat exchangers, reservoir and control system.

- Eaton hydraulic component package comprised of Eaton High-Performance Piston Pumps, Cartridge Valve Technology and Filtration Technology
- Integrated 500 kW chiller system which modulates oil temperature within a precise temperature band
- The entire system design and integration was completed in-house by Berendsen's Engineering and Design team including circuit drawings, manufacturing drawings, modelling, pipe-routing, control system design and programming
- Hydraulic manifolds were designed by Berendsen's engineering division and manufactured at our Newcastle manufacturing facility
- Pipework and electrical installation was completed by Berendsen's local Melbourne installation team
- Overall, the system was effective & durable

PROJECT CHALLENGES

- The size of the required system
- The system needed to be integrated with the customer's existing laboratory testing system
- Budget restrictions
- Deadline was tight, and firm

PROJECT OUTCOME

- Project was delivered on time, and on budget
- The client was satisfied with the new system as all performance requirements were either met or exceeded
- The client was highly impressed with the compact, user-friendly nature of the new control system

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